

Supplementary TABLE 1. Virus specific response of hAECs.**A) 100 most up and down regulated DEGs in influenza infected hAECs**

Gene symbol	Entrez gene name	Probe	Fold change
IL6	interleukin 6 (interferon, beta 2)	ILMN_1699651	1566.31
CXCL10	chemokine (C-X-C motif) ligand 10	ILMN_1791759	1415.43
IL29	interleukin 29 (interferon, lambda 1)	ILMN_2149624	1279.69
CCL5	chemokine (C-C motif) ligand 5	ILMN_1773352	1090.61
OASL	2'-5'-oligoadenylate synthetase-like	ILMN_1674811	871.42
CXCL11	chemokine (C-X-C motif) ligand 11	ILMN_2067890	818.57
IL1A	interleukin 1, alpha	ILMN_1658483	640.76
IL1B	interleukin 1, beta	ILMN_1775501	511.46
IL28A	interleukin 28A (interferon, lambda 2)	ILMN_1662302	457.38
IFNB1	interferon, beta 1, fibroblast	ILMN_1682245	435.41
RSAD2	radical S-adenosyl methionine domain containing 2	ILMN_1657871	433.75
IL28B	interleukin 28B (interferon, lambda 3)	ILMN_1768900	305.36
ISG15	ISG15 ubiquitin-like modifier	ILMN_2054019	289.69
CCL4L1/CCL4L2	chemokine (C-C motif) ligand 4-like 1	ILMN_2100209	274.83
KRT24	keratin 24	ILMN_1770663	245.42
IL1RL1	interleukin 1 receptor-like 1	ILMN_2313672	207.67
IL23A	interleukin 23, alpha subunit p19	ILMN_1715603	202.78
IL17C	interleukin 17C	ILMN_1788109	190.51
IFIT3	interferon-induced protein with tetratricopeptides repeat 3	ILMN_2239754	183.19
AIM2	absent in melanoma 2	ILMN_1681301	175.41
TNFAIP6	tumor necrosis factor, alpha-induced protein 6	ILMN_1785732	166.62
DUOXA2	dual oxidase maturation factor 2	ILMN_1791711	155.62
SPRR2A	small proline-rich protein 2A	ILMN_2211018	137.39
CCL3L1/CCL3L3	chemokine (C-C motif) ligand 3-like 1	ILMN_2105573	124.49
HSD11B1	hydroxysteroid (11-beta) dehydrogenase 1	ILMN_2389501	121.95
IDO1	indoleamine 2,3-dioxygenase 1	ILMN_1656310	115.77
HBEGF	heparin-binding EGF-like growth factor	ILMN_2121408	114.78
CSF3	colony stimulating factor 3 (granulocyte)	ILMN_1697069	98.14
TMEM171	transmembrane protein 171	ILMN_1728009	97.07
IFIT1	interferon-induced protein with tetratricopeptides repeat 1	ILMN_1707695	90.39
HERC5	hect domain and RLD 5	ILMN_1729749	88.52
LAMP3	lysosomal-associated membrane protein 3	ILMN_2170813	84.53
CCL2	chemokine (C-C motif) ligand 2	ILMN_1720048	83.31
IFI44L	interferon-induced protein 44-like	ILMN_1723912	76.77
FOSL1	FOS-like antigen 1	ILMN_1771841	75.02
ADAM8	ADAM metallopeptidase domain 8	ILMN_1708348	72.94
IL32	interleukin 32	ILMN_1778010	72.81
CCL8	chemokine (C-C motif) ligand 8	ILMN_1772964	72.59
IL7R	interleukin 7 receptor	ILMN_1691341	72.42
PTGS2	prostaglandin-endoperoxide synthase 2	ILMN_2054297	71.67
DEFB4A/DEFB4B	defensin, beta 4A	ILMN_2048043	69.72
GBP5	guanylate binding protein 5	ILMN_2114568	69.00

EPSTI1	epithelial stromal interaction 1 (breast)	ILMN_2388547	68.72
MX2	myxovirus (influenza virus) resistance 2 (mobilin)	ILMN_2231928	68.35
IFI6	interferon, alpha-inducible protein 6	ILMN_2347798	66.65
SPRR1A	small proline-rich protein 1A	ILMN_1716591	64.86
C1QTNF1	C1q and tumor necrosis factor related protein 1	ILMN_2380237	64.73
MMP13	matrix metallopeptidase 13 (collagenase 3)	ILMN_1663873	61.82
IL4I1	interleukin 4 induced 1	ILMN_1659960	60.99
PLAUR	plasminogen activator, urokinase receptor	ILMN_2374340	59.35
DEPTOR	DEP domain containing MTOR-interacting protein	ILMN_2172755	-88.33
ADH1C	alcohol dehydrogenase 1C (class I), gamma polypeptide	ILMN_1740717	-82.16
CHST9	carbohydrate (N-acetylgalactosamine 4-O) sulfotransfase	ILMN_1700547	-81.36
PPM1H	protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1	ILMN_1713846	-80.19
AXIN2	axin 2	ILMN_1724480	-67.06
ADH1A	alcohol dehydrogenase 1A (class I), alpha polypeptide	ILMN_1764309	-66.27
KLHL24	kelch-like 24 (Drosophila)	ILMN_1678671	-65.79
KCNJ16	potassium inwardly-rectifying channel, subfamily J, member 16	ILMN_1813741	-52.66
TMEM37	transmembrane protein 37	ILMN_1670672	-52.08
SLC22A16	solute carrier family 22 , member 16	ILMN_1763609	-51.42
FMO5	flavin containing monooxygenase 5	ILMN_1811632	-48.68
PPP1R16B	protein phosphatase 1, regulatory (inhibitor) subunit 16B	ILMN_1727098	-47.88
VAV3	vav 3 guanine nucleotide exchange factor	ILMN_1657679	-45.87
CYP2B7P1	cytochrome P450, family 2, subfamily B, polypeptide 1	ILMN_2191192	-44.08
GPD1L	glycerol-3-phosphate dehydrogenase 1-like	ILMN_1694106	-41.89
RALGPS1	Ral GEF with PH domain and SH3 binding motif	ILMN_1674135	-40.77
YPEL2	yippee-like 2 (Drosophila)	ILMN_1677098	-38.06
SOX21	SRY (sex determining region Y)-box 21	ILMN_1783185	-37.56
CYFIP2	cytoplasmic FMR1 interacting protein 2	ILMN_2354478	-37.23
SLC40A1	solute carrier family 40 (iron-regulated transporter), member 1	ILMN_2053103	-37.10
TSC22D3	TSC22 domain family, member 3	ILMN_2376403	-31.99
CMTM4	CKLF-like MARVEL transmembrane domain containing 4	ILMN_1762718	-31.70
PRRT3	proline-rich transmembrane protein 3	ILMN_1784985	-31.45
SH3BGRL2	SH3 domain binding glutamic acid-rich protein	ILMN_1762764	-31.31
C7orf41	chromosome 7 open reading frame 41	ILMN_1672605	-30.93
ACACB	acetyl-CoA carboxylase beta	ILMN_1763852	-29.67
PTGFR	prostaglandin F receptor (FP)	ILMN_2395652	-29.27
RPRM	reprimed, TP53 dependent G2 arrest mediator	ILMN_1665425	-28.82
CBX7	chromobox homolog 7	ILMN_1657361	-28.81
C10orf81	chromosome 10 open reading frame 81	ILMN_1757099	-26.99
MYB	v-myb myeloblastosis viral oncogene homolog	ILMN_1711894	-26.87
PROM1	prominin 1	ILMN_1786720	-26.56
LRIG1	leucine-rich repeats and immunoglobulin-like domains 1	ILMN_1707342	-25.96
FMO3	flavin containing monooxygenase 3	ILMN_1808657	-25.12
SYNGR1	synaptogyrin 1	ILMN_1727805	-24.30
ELF5	E74-like factor 5 (ets domain transcription factor)	ILMN_1813270	-2.30
PZP	pregnancy-zone protein	ILMN_1708183	-2.61

SUSD4	sushi domain containing 4	ILMN_2360307	-22.11
STOML3	stomatin (EPB72)-like 3	ILMN_1761866	-22.08
UCP2	uncoupling protein 2 (mitochondrial, proton c	ILMN_1685625	-22.03
EGFL6	EGF-like-domain, multiple 6	ILMN_2057479	-21.91
C1orf110	chromosome 1 open reading frame 110	ILMN_1656088	-21.87
PDK3	pyruvate dehydrogenase kinase, isozyme 3	ILMN_1827736	-21.787
DOCK8	dedicator of cytokinesis 8	ILMN_1788931	-21.70
ALOX15	arachidonate 15-lipoxygenase	ILMN_1676042	-21.68
CHKA	choline kinase alpha	ILMN_1658504	-21.26
REEP6	receptor accessory protein 6	ILMN_1697460	-21.91
BCAS1	breast carcinoma amplified sequence 1	ILMN_2136147	-21.21
GATS	GATS, stromal antigen 3 opposite strand	ILMN_1699631	-20.90
ATP6V0A4	ATPase, H ⁺ transporting, lysosomal V0 subu	ILMN_2394287	-20.84

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CXCL10	chemokine (C-X-C motif) ligand 10	ILMN_1791759	252.02
OASL	2'-5'-oligoadenylate synthetase-like	ILMN_1674811	206.55
XAF1	XIAP associated factor 1	ILMN_2370573	99.78
TNFSF13B	tumor necrosis factor (ligand) superfamily, m	ILMN_1758418	83.51
IFI44L	interferon-induced protein 44-like	ILMN_1835092	81.53
GAGE1	G antigen 1	ILMN_1664660	78.70
GSTT1	glutathione S-transferase theta 1	ILMN_1730054	72.12
IFIT2	interferon-induced protein with tetratricopep	ILMN_1739428	71.43
OAS3	2'-5'-oligoadenylate synthetase 3, 100kDa	ILMN_1745397	66.21
GAGE5	G antigen 5	ILMN_1782705	65.89
GAGE4	G antigen 4	ILMN_1715638	61.63
CXCL11	chemokine (C-X-C motif) ligand 11	ILMN_2067890	61.01
MX2	myxovirus (influenza virus) resistance 2 (mo	ILMN_2231928	56.39
AIM2	absent in melanoma 2	ILMN_1681301	45.20
SAMD9L	sterile alpha motif domain containing 9-like	ILMN_1799467	38.96
SRGN	serglycin	ILMN_1760347	36.29
IFI27	interferon, alpha-inducible protein 27	ILMN_2058782	35.88
GAGE6	G antigen 6	ILMN_1783832	35.39
OAS2	2'-5'-oligoadenylate synthetase 2, 69/71kD	ILMN_1709333	34.55
LAMP3	lysosomal-associated membrane protein 3	ILMN_2170814	30.66
CCL5	chemokine (C-C motif) ligand 5	ILMN_1773352	26.74
OLR1	oxidized low density lipoprotein (lectin-like) r	ILMN_1723035	26.33
CSAG1	chondrosarcoma associated gene 1	ILMN_1737640	25.46
CGA	glycoprotein hormones, alpha polypeptide	ILMN_1734176	23.00
USP41	ubiquitin specific peptidase 41	ILMN_1690365	21.62
MAFA	vmaf musculoaponeurotic fibrosarcoma onco	ILMN_1661577	19.52
OAS1	2',5'-oligoadenylate synthetase 1, 40/46kDa	ILMN_1658247	19.17
IRF7	interferon regulatory factor 7	ILMN_1798181	18.97
MRPL20	mitochondrial ribosomal protein L20	ILMN_1745214	17.92

EGFLAM	EGF-like, fibronectin type III and laminin G domain containing	ILMN_1654109	17.55
HSH2D	hematopoietic SH2 domain containing	ILMN_1788017	16.62
STAT1	signal transducer and activator of transcription 1	ILMN_1690105	15.61
GBP5	guanylate binding protein 5	ILMN_2114568	15.29
PMP22	peripheral myelin protein 22	ILMN_1785646	14.98
KRT39	keratin 39	ILMN_1760665	14.78
GBP4	guanylate binding protein 4	ILMN_1771385	14.65
DDX60	DEAD (Asp-Glu-Ala-Asp) box polypeptide 60	ILMN_1795181	14.07
MMP12	matrix metallopeptidase 12 (macrophage elastinase)	ILMN_2073758	13.34
WARS	tryptophanyl-tRNA synthetase	ILMN_1727271	13.34
IFI35	interferon-induced protein 35	ILMN_1745374	12.39
C4BPB	complement component 4 binding protein, beta chain	ILMN_1694588	12.06
HERC6	hect domain and RLD 6	ILMN_1654639	11.74
ISG20	interferon stimulated exonuclease gene 20kDa	ILMN_1659913	11.54
SAMD9	sterile alpha motif domain containing 9	ILMN_1814305	11.32
RTP4	receptor (chemosensory) transporter protein	ILMN_2173975	11.14
TRIM31	tripartite motif-containing 31	ILMN_1748685	11.05
GBP1	guanylate binding protein 1, interferon-inducible	ILMN_2148785	10.90
FRMD3	FERM domain containing 3	ILMN_1698725	10.57
TYMP	thymidine phosphorylase	ILMN_2109708	10.29
SP110	SP110 nuclear body protein	ILMN_1672661	10.05
ARHGEF35	Rho guanine nucleotide exchange factor (GEF)	ILMN_2214473	-32.60
RPS23	ribosomal protein S23	ILMN_1772459	-11.95
ACO1	aconitase 1, soluble	ILMN_1750800	-8.32
PLUNC	palate, lung and nasal epithelium associated	ILMN_1774250	-8.21
FAM3B	family with sequence similarity 3, member B	ILMN_2355486	-7.87
SORD	sorbitol dehydrogenase	ILMN_2391231	-7.07
ST3GAL3	ST3 beta-galactoside alpha-2,3-sialyltransferase	ILMN_2350315	-6.56
TXNDC12	thioredoxin domain containing 12 (endoplasmic reticulum)	ILMN_1783753	-6.29
ST3GAL3	ST3 beta-galactoside alpha-2,3-sialyltransferase	ILMN_1699472	-6.00
BDH1	3-hydroxybutyrate dehydrogenase, type 1	ILMN_1799280	-5.74
SERPINF2	serpin peptidase inhibitor, clade F	ILMN_1740005	-5.58
STATH	statherin	ILMN_2322356	-5.49
BMF	Bcl2 modifying factor	ILMN_1695354	-5.45
UGT2B7	UDP glucuronosyltransferase 2 family, polypeptide 7	ILMN_1755897	-5.24
MUC12	mucin 12, cell surface associated	ILMN_1799020	-5.14
SCPEP1	serine carboxypeptidase 1	ILMN_1767470	-4.90
STATH	statherin	ILMN_1682319	-4.86
BEGAIN	brain-enriched guanylate kinase-associated protein	ILMN_1668924	-4.83
GLS	glutaminase	ILMN_2188722	-4.53
MT3	metallothionein 3	ILMN_1675947	-4.35
PCDH19	protocadherin 19	ILMN_1805132	-4.07
C17orf44	chromosome 17 open reading frame 44	ILMN_1681252	-3.92
SENP8	SUMO/sentrin specific peptidase family member 8	ILMN_1767690	-3.69
UGT2B7	UDP glucuronosyltransferase 2 family, polypeptide 7	ILMN_1679194	-3.65

CAT	catalase	ILMN_1651705	-3.56
SORD	sorbitol dehydrogenase	ILMN_2285375	-3.55
ALOX15	arachidonate 15-lipoxygenase	ILMN_1676042	-3.46
PARM1	prostate androgen-regulated mucin-like protein 1	ILMN_1656560	-3.43
MGC72104	FSHD region gene 1 family, member B	ILMN_1688318	-3.37
FAM72B	family with sequence similarity 72, member E	ILMN_1723433	-3.37
NEK4	NIMA (never in mitosis gene a)-related kinase 4	ILMN_1721129	-3.31
RPSA	ribosomal protein SA	ILMN_1664910	-3.29
UGT2B17	UDP glucuronosyltransferase 2 family, polypeptide 17	ILMN_1808677	-3.25
ACADL	acyl-CoA dehydrogenase, long chain	ILMN_1660890	-3.16
NUAK1	NUAK family, SNF1-like kinase, 1	ILMN_2079786	-3.07
RGS17	regulator of G-protein signaling 17	ILMN_1725485	-3.06
PLA2G4E	phospholipase A2, group IVE	ILMN_1810595	-3.02
SLC25A11	solute carrier family 25 , member 11	ILMN_1664168	-2.99
TPD52L1	tumor protein D52-like 1	ILMN_1714383	-2.95
HNRPA1L3	heterogeneous nuclear ribonucleoprotein A1	ILMN_1676091	-2.92
ERP27	endoplasmic reticulum protein 27	ILMN_1655261	-2.92
ATP6V1C2	ATPase, H+ transporting, lysosomal 42kDa, 1	ILMN_1660729	-2.90
TUBA4B	tubulin, alpha 4b (pseudogene)	ILMN_1677635	-2.89
C7orf41	chromosome 7 open reading frame 41	ILMN_1672605	-2.86
LDLRAD1	low density lipoprotein receptor class A domain containing 1	ILMN_1731343	-2.86
SLC1A1	solute carrier family 1	ILMN_1658917	-2.83
TTR	transthyretin	ILMN_2198912	-2.82
AK1	adenylate kinase 1	ILMN_1779965	-2.81
ELF5	E74-like factor 5 (ets domain transcription factor)	ILMN_1813270	-2.73
TSPAN8	tetraspanin 8	ILMN_1683263	-2.71

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IDO1	indoleamine 2,3-dioxygenase 1	ILMN_1656310	115.77
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SPRR1A	small proline-rich protein 1A	ILMN_1716591	64.86
IL4I1	interleukin 4 induced 1	ILMN_1659960	60.99
ESM1	endothelial cell-specific molecule 1	ILMN_1773262	56.39
CXCL5	chemokine (C-X-C motif) ligand 5	ILMN_2171384	56.39
RPPH1	ribonuclease P RNA component H1	ILMN_1704056	52.00
TNF	tumor necrosis factor	ILMN_1728106	51.18
BCL2A1	BCL2-related protein A1	ILMN_1769229	49.93
S1PR3	sphingosine-1-phosphate receptor 3	ILMN_1703531	49.39
RAET1L	retinoic acid early transcript 1L	ILMN_2206126	48.03
NFS1	NFS1 nitrogen fixation 1 homolog (<i>S. cerevis</i>)	ILMN_1761314	46.76
TNFAIP3	tumor necrosis factor, alpha-induced protein	ILMN_1702691	45.96
CMPK2	cytidine monophosphate (UMP-CMP) kinase 2	ILMN_1783621	44.44
CSF2	colony stimulating factor 2 (granulocyte-mac	ILMN_1661861	44.20
MMP1	matrix metallopeptidase 1 (interstitial collage	ILMN_1726448	41.37
SPRR1B	small proline-rich protein 1B	ILMN_1711174	40.58
CD38	CD38 molecule	ILMN_2233783	39.85
GJB6	gap junction protein, beta 6, 30kDa	ILMN_2226223	36.95
KRT6B	keratin 6B	ILMN_1669820	36.89
CLCA3	chloride channel accessory 3 (pseudogene)	ILMN_1773681	36.13
MAN1C1	mannosidase, alpha, class 1C, member 1	ILMN_1713807	-100.00
DEPTOR	DEP domain containing MTOR-interacting pro	ILMN_2172755	-88.32
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SLC22A16	solute carrier family 22 (organic cation/carni	ILMN_1763609	-51.42

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REEP6	receptor accessory protein 6	ILMN_1697460	-21.19
BCAS1	breast carcinoma amplified sequence 1	ILMN_2136147	-21.02
GATS	GATS, stromal antigen 3 opposite strand	ILMN_1699631	-20.97
ATP6V0A4	ATPase, H+ transporting, lysosomal V0 subu	ILMN_2394287	-20.89
RAB36	RAB36, member RAS oncogene family	ILMN_1733045	-20.23
HEY1	hairy/enhancer-of-split related with YRPW mo	ILMN_1788203	-19.95
CRYM	crystallin, mu	ILMN_1779241	-19.84
MDH1B	malate dehydrogenase 1B, NAD (soluble)	ILMN_1683377	-19.63
KLHL13	kelch-like 13 (Drosophila)	ILMN_2140510	-19.37
C13orf15	chromosome 13 open reading frame 15	ILMN_1658494	-19.28
ALDH3A2	aldehyde dehydrogenase 3 family, member A	ILMN_1794825	-19.22
VPS13D	vacuolar protein sorting 13 homolog D (S. ce	ILMN_1656840	-19.19
RAB17	RAB17, member RAS oncogene family	ILMN_2052373	-18.99
GAMT	guanidinoacetate N-methyltransferase	ILMN_1756469	-18.76
LRRC20	leucine rich repeat containing 20	ILMN_1690523	-18.72

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Gene symbol	Entrez gene name	Probe	Fold change
XAF1	XIAP associated factor 1	ILMN_2370573	99.78
TNFSF13B	tumor necrosis factor (ligand) superfamily, m	ILMN_1758418	83.51
GAGE1 (includes o	G antigen 1	ILMN_1664660	78.70

GSTT1	glutathione S-transferase theta 1	ILMN_1730054	72.12
IFIT2	interferon-induced protein with tetratricopeptidyl prolyl cyclase activity	ILMN_1739428	71.43
GAGE5	G antigen 5	ILMN_1782705	65.89
GAGE4	G antigen 4	ILMN_1715638	61.63
SAMD9L	sterile alpha motif domain containing 9-like	ILMN_1799467	38.96
GAGE6	G antigen 6	ILMN_1783832	35.39
OLR1	oxidized low density lipoprotein (lectin-like) receptor	ILMN_1723035	26.33
CGA	glycoprotein hormones, alpha polypeptide	ILMN_1734176	23.00
MRPL20	mitochondrial ribosomal protein L20	ILMN_1745214	17.92
HSH2D	hematopoietic SH2 domain containing	ILMN_1788017	16.62
PMP22	peripheral myelin protein 22	ILMN_1785646	14.98
MMP12	matrix metallopeptidase 12 (macrophage elastinase)	ILMN_2073758	13.34
IFI35	interferon-induced protein 35	ILMN_1745374	12.39
C4BPB	complement component 4 binding protein, beta chain	ILMN_1694588	12.06
FRMD3	FERM domain containing 3	ILMN_1698725	10.57
HRASLS2	HRAS-like suppressor 2	ILMN_1809259	9.72
PRIC285	peroxisomal proliferator-activated receptor A	ILMN_1787509	9.38
GNLY	granulysin	ILMN_1790692	9.08
ITLN1	intelectin 1 (galactofuranose binding)	ILMN_2165993	8.73
MGC39372	serpin peptidase inhibitor, clade B (ovalbumin)	ILMN_1669122	8.25
CT45A2 (includes)	cancer/testis antigen family 45, member A2	ILMN_1757689	8.20
UTP3	UTP3, small subunit (SSU) processome component	ILMN_2090987	7.67
UBQLNL	ubiquilin-like	ILMN_1748907	6.43
CHURC1	churchill domain containing 1	ILMN_1798177	6.25
CYP4F11	cytochrome P450, family 4, subfamily F, polyunsaturated fatty acid hydroxylase	ILMN_1719883	6.24
BTN3A1	butyrophilin, subfamily 3, member A1	ILMN_1802708	6.07
SHH	sonic hedgehog	ILMN_1652693	6.07
UBD	ubiquitin D	ILMN_1678841	5.96
SLCO2A1	solute carrier organic anion transporter family 2, member 1	ILMN_1705231	5.82
MDK	midkine (neurite growth-promoting factor 2)	ILMN_1659142	5.81
SEMA4G	sema domain, immunoglobulin domain (Ig), transmembrane 4, member 1	ILMN_1678974	5.70
C1R	complement component 1, r subcomponent	ILMN_1677198	5.70
SLC25A28	solute carrier family 25, member 28	ILMN_1790472	5.55
TNNI3	troponin I type 3 (cardiac)	ILMN_1768637	5.55
DHX58	DEXH (Asp-Glu-X-His) box polypeptide 58	ILMN_1678422	5.47
EXOG	endo/exonuclease (5'-3'), endonuclease G-like	ILMN_1709747	5.26
LAMA1	laminin, alpha 1	ILMN_1696434	5.24
IL7	interleukin 7	ILMN_1705769	5.18
LAG3	lymphocyte-activation gene 3	ILMN_1813338	5.17
C2orf27A/C2orf27B	chromosome 2 open reading frame 27A	ILMN_1684726	4.81
PPM1J	protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1	ILMN_1799150	4.64
FCGBP	Fc fragment of IgG binding protein	ILMN_2302757	4.63
RBM11	RNA binding motif protein 11	ILMN_1651712	4.59
STAT2	signal transducer and activator of transcription 2	ILMN_1690921	4.38
DUSP5	dual specificity phosphatase 5	ILMN_1656501	4.32

HIST2H2BE (includ	histone cluster 2, H2be	ILMN_1732071	4.30
HLA-B	major histocompatibility complex, class I, B	ILMN_1778401	4.13
HIST1H2BJ/HIST1	histone cluster 1, H2bk	ILMN_1813314	3.97
HOXC6	homeobox C6	ILMN_1794492	3.91
CCDC109B	coiled-coil domain containing 109B	ILMN_1801766	3.75
SLC2A3	solute carrier family 2 (facilitated glucose tra	ILMN_1775708	3.62
CBX1	chromobox homolog 1	ILMN_1770244	3.58
HLA-G	major histocompatibility complex, class I, G	ILMN_1656670	3.57
PAG1	phosphoprotein associated with glycosphingo	ILMN_2055156	3.56
DPYSL3	dihydropyrimidinase-like 3	ILMN_1679262	3.51
BCYRN1	brain cytoplasmic RNA 1 (non-protein coding)	ILMN_1678757	3.36
TIPRL	TIP41, TOR signaling pathway regulator-like (ILMN_2249282	3.27
SHISA5	shisa homolog 5 (Xenopus laevis)	ILMN_2139100	3.18
IFI30	interferon, gamma-inducible protein 30	ILMN_1807277	3.09
C21orf91	chromosome 21 open reading frame 91	ILMN_1698166	3.01
SBK1	SH3-binding domain kinase 1	ILMN_1728298	2.83
TNFRSF25	tumor necrosis factor receptor superfamily, n	ILMN_1765109	2.70
MT1E	metallothionein 1E	ILMN_1718968	2.67
PHF15	PHD finger protein 15	ILMN_1795285	2.64
MOV10	Mov10, Moloney leukemia virus 10, homolog (ILMN_1725700	2.58
C4orf33	chromosome 4 open reading frame 33	ILMN_1812701	2.56
SPN	sialophorin	ILMN_1801040	2.55
C20orf127	metallothionein 1 pseudogene 3	ILMN_1662640	2.51
TNFSF10	tumor necrosis factor (ligand) superfamily, m	ILMN_1801307	2.44
SLC35F2	solute carrier family 35, member F2	ILMN_2075189	2.43
CTSO	cathepsin O	ILMN_1769633	2.38
U2AF1L4	U2 small nuclear RNA auxiliary factor 1-like 4	ILMN_1779177	2.37
FXYD3	FXYD domain containing ion transport regulat	ILMN_1665372	2.31
MIA3	melanoma inhibitory activity family, member :	ILMN_2312906	2.31
PLOD2	procollagen-lysine, 2-oxoglutarate 5-dioxyger	ILMN_2410924	2.28
STEAP1	six transmembrane epithelial antigen of the p	ILMN_1705629	2.26
BHLHE40	basic helix-loop-helix family, member e40	ILMN_1768534	2.24
NCCRP1	non-specific cytotoxic cell receptor protein 1	ILMN_1713397	2.19
SCIN	scinderin	ILMN_1813561	2.11
GCM1	glial cells missing homolog 1 (Drosophila)	ILMN_1695135	2.10
OR7E156P	olfactory receptor, family 7, subfamily E, mem	ILMN_2090351	2.10
C1orf116	chromosome 1 open reading frame 116	ILMN_2073446	2.09
TRIM38	tripartite motif-containing 38	ILMN_1697971	2.06
SRD5A1	steroid-5-alpha-reductase, alpha polypeptide	ILMN_1793241	2.05
ARHGEF35	Rho guanine nucleotide exchange factor (GEF	ILMN_2214473	-32.61
RPS23	ribosomal protein S23	ILMN_1772459	-11.95
PLUNC	palate, lung and nasal epithelium associated	ILMN_1774250	-8.21
FAM3B	family with sequence similarity 3, member B	ILMN_2355486	-7.87
SORD	sorbitol dehydrogenase	ILMN_2391231	-7.08
ST3GAL3	ST3 beta-galactoside alpha-2,3-sialyltransfer	ILMN_2350315	-6.57

BDH1	3-hydroxybutyrate dehydrogenase, type 1	ILMN_1799280	-5.75
SERPINF2	serpin peptidase inhibitor, clade F (alpha-2 an	ILMN_1740005	-5.58
STATH	statherin	ILMN_2322356	-5.50
UGT2B7	UDP glucuronosyltransferase 2 family, polype	ILMN_1755897	-5.25
MUC12	mucin 12, cell surface associated	ILMN_1799020	-5.14
SCPEP1	serine carboxypeptidase 1	ILMN_1767470	-4.91
BEGAIN	brain-enriched guanylate kinase-associated hc	ILMN_1668924	-4.83
MT3	metallothionein 3	ILMN_1675947	-4.35
C17orf44	chromosome 17 open reading frame 44	ILMN_1681252	-3.93
SENP8	SUMO/sentrin specific peptidase family mem	ILMN_1767690	-3.69
PARM1	prostate androgen-regulated mucin-like prote	ILMN_1656560	-3.43
MGC72104	FSHD region gene 1 family, member B	ILMN_1688318	-3.38
NEK4	NIMA (never in mitosis gene a)-related kinase	ILMN_1721129	-3.31
RPSA	ribosomal protein SA	ILMN_1664910	-3.29
ACADL	acyl-CoA dehydrogenase, long chain	ILMN_1660890	-3.17
NUAK1	NUAK family, SNF1-like kinase, 1	ILMN_2079786	-3.07
RGS17	regulator of G-protein signaling 17	ILMN_1725485	-3.07
PLA2G4E	phospholipase A2, group IVE	ILMN_1810595	-3.02
HNRPA1L3	heterogeneous nuclear ribonucleoprotein A1	ILMN_1676091	-2.93
TTR	transthyretin	ILMN_2198912	-2.82
ANKRD34A	ankyrin repeat domain 34A	ILMN_2119793	-2.51
DNAJB5	DnaJ (Hsp40) homolog, subfamily B, member	ILMN_1794056	-2.44
ANKRD40	ankyrin repeat domain 40	ILMN_1758846	-2.39
TMC7	transmembrane channel-like 7	ILMN_1689306	-2.38
TCN1	transcobalamin I (vitamin B12 binding protein	ILMN_1768469	-2.38
PSPN	persephin	ILMN_1789887	-2.32
RPL17	ribosomal protein L17	ILMN_1655422	-2.29
PVRL3	poliovirus receptor-related 3	ILMN_1727633	-2.28
CKMT1A/CKMT1B	creatine kinase, mitochondrial 1B	ILMN_1732066	-2.17
C10orf79	chromosome 10 open reading frame 79	ILMN_1805603	-2.13
ITGAE	integrin, alpha E (antigen CD103, human muc	ILMN_1683927	-2.11
MTRNR2L1	MT-RNR2-like 1	ILMN_1816342	-2.07
NDUFS1	NADH dehydrogenase (ubiquinone) Fe-S prot	ILMN_1728810	-2.05